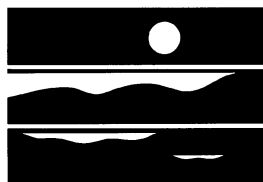


Guidance for Local Governments  
when Submitting Manuals and Associated  
Ordinances for Equivalency Review



WASHINGTON STATE  
DEPARTMENT OF  
E C O L O G Y

March 1994

Publication #94-45



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# **GUIDANCE FOR LOCAL GOVERNMENTS WHEN SUBMITTING MANUALS AND ASSOCIATED ORDINANCES FOR EQUIVALENCY REVIEW**

## **Introduction**

The intent of this guidance is to explain what “substantially equivalent” technical manuals and ordinances should contain, and the method that a local government should use to develop alternative manuals for Ecology review pursuant to the 1991 Puget Sound Water Quality Management Plan (revised, February, 1992) (the Plan).

This guidance should only be used for adoption of a manual that is substantially equivalent to Ecology’s “Stormwater Management Manual for the Puget Sound Basin”, dated February, 1992 (the technical manual). This equivalency guidance will be updated as necessary during the general update planned for the technical manual in 1994 – 1995.

## **What is Required of Local Governments?**

The 1991 Puget Sound Water Quality Management Plan (rev. February, 1992) requires that:

*“All cities and counties in the Puget Sound basin shall adopt ordinances requiring stormwater controls for new development and re-development.*

*These ordinances shall address, at a minimum, (1) the control of off-site water quality and quantity (as related to quality) impacts; (2) the use of source control best management practices and treatment best management practices; (3) the effective treatment, using best management practices, of the storm size and frequency (design storm) as specified in the manual for proposed development; (4) the use of infiltration, with appropriate precautions, as the first consideration in stormwater management; (5) the protection of stream channels and wetlands; and (6) erosion and sedimentation control for new construction and re-development projects....”*

These requirements are expressed as the Minimum Requirements for New Development and Redevelopment in the model Stormwater Management Ordinance which can be found in the “Stormwater Program Guidance Manual for the Puget Sound Basin”, July, 1992 (the guidance manual). The Minimum Requirements are repeated in Chapter I-2 of Ecology’s

technical manual. This model ordinance establishes the regulatory framework for cities and counties to manage stormwater.

Additionally, the Plan states that:

*“Each city and county shall also develop and enforce, within local governments’ authority, operation and maintenance programs and ordinances for new and existing public and private stormwater systems...”*

A model Stormwater Maintenance Ordinance for operation and maintenance programs and additional information on O&M can also be found in the guidance manual.

*“All programs developed under this element shall be consistent with the plan guidance and model ordinances in elements SW-3 and SW-4. Each city and county shall adopt ordinances consistent with the model ordinances (SW-4) requiring stormwater quality and quantity (as related to quality) controls for new development and re-development and requiring and enforcing maintenance of privately owned stormwater systems....”*

*“In conjunction with the runoff control ordinances for new development and redevelopment, each jurisdiction shall adopt a stormwater management manual containing best management practices (BMPs). A local government may adopt the manual prepared by Ecology or prepare its own manual as long as it has substantially equivalent technical standards to those prepared by Ecology. Ecology shall review local government alternative manuals for substantial consistency with the plan and Ecology’s manual and guidance....” (emphasis added)*

*“Target Date: To be consistent with the expected growth management planning schedules as follows: all cities and counties shall incorporate Plan stormwater considerations into critical area ordinances, county-wide policies, comprehensive plans and implementation regulations; adopt ordinances and stormwater manuals and comply with the operation and maintenance program requirements by July 1, 1994.” (emphasis added)*

To satisfy the Plan requirements a local government must adopt ordinances that contain Minimum Requirements for new development, redevelopment and O&M that are consistent with those contained in Ecology’s model ordinances. A technical manual may be adopted either as an attachment to the ordinance containing the Minimum Requirements, or the ordinance may refer to the manual as guidance to be used to meet the Minimum Requirements. The Minimum Requirements do not have to be included in both the ordinance and manual; Ecology chose to include them in both in order to make them more visible to readers.

While the Plan calls for ordinance and manual adoption by the target date of July 1, 1994, Ecology does not anticipate that all jurisdictions will have their manuals completed or adopted by that date. Progress on manual adoption (or lack thereof) will be reported by Ecology to the Puget Sound Water Quality Authority (the Authority) after that date. Depending on the number of manuals and the timeframe in which they are submitted to Ecology, we may not have completed our review by that date. If this is the case, it will be made clear to the Authority.

## **What Does the Plan Require of Ecology?**

The Department of Ecology is responsible for review of alternative manuals for “substantial consistency with the Plan and Ecology’s manual and guidance.” Ecology is also required to review local government programs every two years “to ensure consistent and adequate implementation and report to the Authority.” By May 1, 1996, we are required to complete the first round of biennial reviews of all local Basic Stormwater Programs and report our findings to the Authority.

Technical assistance is available to cities and counties in the preparation of ordinances and manuals. Local governments are encouraged to contact us about questions on content and related matters. It’s helpful to review draft ordinances or manuals prior to adoption to determine whether Plan requirements are being met. This saves cities and counties time and effort by minimizing the possible need for local governments to amend ordinances to comply with Plan requirements.

## **The Definition of “Substantially Equivalent Technical Standards”**

The Plan language includes this phrase but does not define it. Ecology has defined it to mean:

Substantially equivalent technical standard – A management measure<sup>1</sup> that provides equal or greater protection of a receiving water or equal or greater level of pollution treatment as that which would be provided using Ecology’s Minimum Requirements (an equivalent regulatory standard) or an approved design standard (best management practice).

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<sup>1</sup> A management measure is defined in Section 6217(g)(5) of the Coastal Zone Act Reauthorization Amendments of 1990 as: “economically achievable measures for the control of the addition of pollutants from existing and new categories and classes of nonpoint sources of pollution, which reflect the greatest degree of pollutant reduction achievable through the application of the best available nonpoint pollution control practices, technologies, processes, siting criteria, operating methods, or other alternatives.”

All proposed substantially equivalent technical standards must be accompanied by adequate documentation that demonstrates its equivalence with Ecology's Minimum Requirements, definitions, BMP selection process and/or BMPs as appropriate.

## **Equivalency Review Criteria**

The method(s) chosen to meet or exceed Ecology's requirements need not be identical, but they must be equivalent, meaning that an equal or greater level of protection or treatment is provided.

It is the proponent's responsibility to justify in detail any requirement which differs from those now contained in Ecology's model ordinance and technical manual. Methods such as case studies comparing and contrasting Ecology's methodology to the local governments are encouraged. The more detailed the proponent can be, the quicker Ecology's review will be.

Ecology's equivalency review criteria are:

1. The Minimum Requirements for new development and redevelopment now in the model ordinance and the technical manual or their equivalents must be included in the ordinance adopted by the local government. More stringent requirements may be used, and/or the Minimum Requirements may be tailored to local circumstances through the use of basin plans.
2. The thresholds for and definitions of new development, redevelopment, land disturbing activities, and existing conditions should provide equivalent protection of receiving waters or equivalent levels of pollution treatment as those provided by Ecology's criteria.
3. The substantially equivalent manual must include BMP selection and site planning processes which have outcomes that provide equivalent or greater protection to those in Ecology's technical manual.
4. BMPs equivalent to those contained in Volumes II through IV of Ecology's manual must be included in the local government's version of the manual.
5. An exceptions or variance process similar in content to Section I-2.16, Exceptions, must be included.

## **Why Did Ecology Select These Elements as Review Criteria?**

The Minimum Requirements form the core of both the model ordinances and the manual. They are the backbone for the other design elements in the technical manual. It is critical that these Minimum Requirements be adhered to as closely as possible. Often the Minimum Requirements are considered “big picture” items and more attention is paid to the criteria used to design BMPs. The Minimum Requirements establish the pollution control objectives which the BMPs are designed to meet. The definitions of terms and the thresholds set are equally important for the same reasons.

The other elements in the manual; BMP selection, the site planning process, the exceptions process and BMP designs are all important, but they are not as critical to the success of a stormwater management program as are the Minimum Requirements. They are also not specifically mentioned in the Plan.

When Ecology reviews manuals and ordinances for equivalency purposes, we will consider the overall intent of the program and most specifically at the proposed Minimum Requirements.

## **What Should be Done to Develop a “Substantially Equivalent” Manual?**

Ecology recommends that you read all of Volume I as the first step in developing your equivalency material. Also note that there are assessment forms (Tables 1 and 2) enclosed with this document that are provided to assist you; please submit these forms or something similar to Ecology with all other equivalency documents.

1. Please contact Ecology early in the manual development process. Early involvement will ensure a minimum review period, and prevent misunderstandings which might otherwise occur.
2. Review the model ordinances contained in the “Stormwater Guidance Manual for the Puget Sound Basin”. They should be helpful guidance to use in drafting your own ordinance(s). Tables 3 and 4 at the back of this paper also contain information about the model ordinances.
3. Review Chapters I-2 through I-4 of the manual, concentrating on the elements described above. The Minimum Requirements each have an objective, and some also contain supplementary guidance which can help you to determine whether or not modification or replacement of a Minimum Requirement is necessary. If you determine that there is need for change, this need, and a detailed rationale for the change must be provided to Ecology.



Also review the information contained in Section I-2.16 on the exceptions or variance process.

4. Experimental BMPs – As an equivalency condition, local governments should require that experimental treatment BMPs be monitored to document their effectiveness at reducing concentrations and loads for target pollutants before these BMPs are approved for general use. This condition will apply regardless of whether the experimental BMP is a proprietary product or not (Ecology cannot legally recommend the use of proprietary products).

Local governments are not required to receive Ecology's acceptance of experimental BMPs but submittal of monitoring data and technical documentation to Ecology will allow for broader discussion and distribution of information on experimental BMPs. It would be helpful to have design details and any other technical documentation included in the submittal to Ecology.

## **The Relationship Between Ordinances and Manuals**

Decide whether you will be incorporating the manual by reference into the ordinance, adopting the Minimum Requirements as they stand, or adapting the Minimum Requirements for inclusion in the ordinance. If the entire manual (either Ecology's manual or one written by a local government) is incorporated into the ordinance by reference, all the information contained in the manual becomes part of the local government code.

The advantage of this method is that there are no questions about what is and is not an enforceable part of the local government code. One disadvantage is that if a local government wishes to change something in the manual, the ordinance may have to undergo revision as well. Additionally, the Plan requires that the ordinance and/or the manual adopted be revised within a year following any Ecology update of the technical manual.

If only parts of the manual (or only the Minimum Requirements themselves) are adopted in an ordinance, those parts are then enforceable. The other parts of the manual serve as additional guidance. If this method is chosen, only revisions to those parts of the manual adopted in the ordinance require revision of the ordinance. Updates can easily be made to the parts of the manual not adopted in the ordinance.

Local governments should look at the level of flexibility that they wish to include in their requirements. Ecology's Minimum Requirements are designed to provide as much flexibility as possible. Ecology chose this degree of flexibility in order to allow local governments latitude in setting their own minimums. This amount of flexibility can make it difficult for both designers and plan reviewers to understand exactly what is required. The more precise the requirements are made, the less flexibility allowed, the easier plan review will be. Tables 3 and 4 provide specific information on each ordinance and indicate which parts of the local government ordinance must contain substantially equivalent or identical language.

## **The Use of Basin Plans as Part of the Minimum Requirements**

If any of the Minimum Requirements within an ordinance are tailored by an adopted and implemented basin plan, indicate which requirements. Include information in your submittal to Ecology which illustrates how the requirements in the basin plan meet or exceed the standards set forth in the Ecology's Minimum Requirements.

We recognize that requirements may actually be less stringent in some areas of a basin. Again, we need an explanation of how those standards contribute to the overall effectiveness of the stormwater program within the watershed. Also provide documentation to show that the basin plan has been adopted and implemented by the local government.

When using a basin plan to revise the Minimum Requirements, the revisions must be based on an assessment of current and future conditions in terms of pollutant concentrations and loads and/or changes in hydrologic regimes. The question to be answered for each Minimum Requirement when using the basin plan approach is "Will revising the Minimum Requirement provide an equal or greater level of protection?"

## **What Should Be Submitted to Ecology?**

Prepare a transmittal letter to Ecology to accompany 3 copies of the draft ordinance and/or manual. Please note: if the local government has not yet written the enabling ordinance(s), and chooses to adopt separate Minimum Requirements as opposed to adoption of the entire manual, Ecology will give conditional approval of the manual pending review of the ordinance(s). In the transmittal letter, detail out all proposed changes as described above. The forms at the back of this guidance should help. Mail the package to:

Helen Pressley  
Department of Ecology  
Water Quality Program  
P.O. Box 47600  
Olympia, WA 98504-7600

We will contact you and let you know at that time what our review timeframe will be. If necessary, we will arrange meetings to discuss your proposals and resolve any differences.

There are three possible outcomes from this review process. The first outcome is that Ecology would approve outright both the manual and ordinances with few or no changes. The second possibility is that Ecology would conditionally approve all or parts of the submittal. In this case, either further negotiations are required, or a timeframe would be established after which Ecology would review these areas again and make a final determination. The last outcome, and the least desirable in all respects is that Ecology would be forced to disapprove all or parts of the manual or ordinance. This would only occur if negotiations completely break down, and no agreement can be reached.

One of the functions of the Stormwater Unit at Ecology is to provide technical assistance in ordinance and manual development. Ecology's early involvement can save time and prevent possible misunderstandings which might occur otherwise. Contact either Helen Pressley at (206) 407-6456 or Michelle Horn at (206) 407-6450 for information and assistance. We can provide copies of the manual and model ordinances on 3½" or 5¼" disks.

We cannot emphasize how important it is to keep in touch with Ecology throughout the manual development process. Besides preventing any misunderstandings, knowing ahead of time that a manual package will be arriving will help us to adjust our workload to provide timely review to the extent that resources are available.

TABLE 1 – ASSESSMENT FORM TO DETERMINE EQUIVALENCY WITH ECOLOGY’S MINIMUM REQUIREMENTS,  
DEFINITIONS AND THRESHOLDS

DOE MINIMUM REQUIREMENT	LOCAL GOVERNMENT EQUIVALENT	INCORPORATED IN ORDINANCE OR VIA OTHER MECHANISM? EXPLAIN	DESCRIBE WHY IT IS EQUIVALENT	ANY RESTRICTIONS ON ITS APPLICATION?	DOE RESPONSE
#1 Erosion and Sediment Control	#1 ESC for sites over 1 acre	Ordinance number 0-34-1993	Sites less than one acre do not generate significant amounts of pollution and are administratively difficult to control.	This requirement applies only to new development and not to redevelopment.	Sorry, this MR is not equivalent.

Please note, this is just an example and can be adjusted as necessary. This information can also be provided in narrative form.

TABLE 2 – ASSESSMENT FORM TO DETERMINE EQUIVALENCY OF BMP SELECTION AND DESIGN

BMP NAME & ECOLOGY'S BMP NUMBER	EXPLAIN DIFFERENCES IN DESIGN, O&M CRITERIA AND REASONS WHY CONSIDERED EQUIVALENT	ANY RESTRICTIONS AS TO USE? EXPLAIN	DOE RESPONSE
Wet Pond (conventional) RD.05	Requires a uniform 50 sq.ft. surface area per acre of site impervious cover; Ecology criteria varies from 20-100 sq.ft. per acre of site impervious area. Maximum depth is 8 feet rather than 6 feet in order to reduce surface area requirements. See enclosed supporting documentation "Technical Justification for Wet Pond Sizing in Pierce County."	Wet ponds cannot be used adjacent to steep, unstable slopes.	Acceptable...

Please note, this is just an example and can be adjusted as necessary. Remember that MPBs, etc. will be reviewed based on a different set of criteria than are the Minimum Requirements. This information can also be presented in narrative form.

TABLE 3 – ADDITIONAL INFORMATION ON THE MODEL STORMWATER MANAGEMENT ORDINANCE

SECTION REFERENCE	HEADING	COMMENTS	IS SECTION REQUIRED?
Section 1	Findings of Fact, Need and Purpose	<p>1. Where stormwater management is a new concept, reasons for adopting the ordinance should be included. Being a Plan mandate is a reason for adoption.</p> <p>2. Public health, safety &amp; pollution concerns should be addressed.</p> <p>3. Any local concerns should be emphasized.</p>	This is an optional section; its omission would not affect the legality of the ordinance.
Section 2	Definitions	<p>1. Definitions should explain stormwater concepts that are not commonly understood or which have a unique meaning.</p> <p>2. The technical manual glossary is a good source document.</p>	This entire section is required. Definitions used must be either identical to Ecology definitions or an approved equivalent.
Section 3	General Provisions		This is an optional section; its omission would not affect the legality of the ordinance.

SECTION REFERENCE	HEADING	COMMENTS	IS SECTION REQUIRED?
Section 4	Applicability of Ordinance	<p>1. Include the area that the ordinance actually applies to (e.g. this may be only part of a city or county).</p> <p>2. Include a paragraph regarding potential conflicts between ordinances.</p> <p>3. List all the regulated permits and activities that this ordinance applies to.</p> <p>4. Regulated activities can only be allowed after approval of the Stormwater Site Plan. Also list the types of site plans allowed in this jurisdiction.</p>	<p>1. Optional.</p> <p>2. The first paragraph of this section is optional, but is recommended.</p> <p>3. Required.</p> <p>4. Required.</p>
Section 5	Regulated and Allowed Activities	<p>1. Include a list of appropriate new development and redevelopment activities regulated by this ordinance.</p> <p>2. Include any applicable exemptions (e.g. commercial agriculture). Note that Class IV General Forest practices (timber conversions to other uses) are regulated.</p>	<p>1. Required.</p> <p>2. Required as necessary.</p>

SECTION REFERENCE	HEADING	COMMENTS	IS SECTION REQUIRED?
Section 6	General Requirements	<p>1. Adopt Ecology's manual or an approved equivalent. This may also be done in a separate ordinance. See the discussion in the guidance for more details.</p> <p>2. Include a statement that BMPs are to be used to control pollutants and comply with standards.</p> <p>3. Procedures for approval of experimental BMPs may be included here.</p> <p>4. Prohibit illicit discharges.</p>	<p>1. Required.</p> <p>2. Required.</p> <p>3. Regulation of experimental BMPs is optional.</p> <p>4. Required.</p>
Section 7	Approval Standards	<p>1. This section should be included verbatim from the model ordinance, or approved substantially equivalent language may be used.</p>	Required.
Section 8	Administration	<p>1. List the position or department that administers the ordinance.</p> <p>2. Include application review choices.</p> <p>3. List the position or department that enforces the ordinance.</p> <p>4. List the position or department that has inspection authority and the stages of construction to be inspected.</p>	<p>1. Required.</p> <p>2. Recommended.</p> <p>3. Required.</p> <p>4. Required.</p>



SECTION REFERENCE	HEADING	COMMENTS	IS SECTION REQUIRED?
Section 9	Enforcement	<p>1. Require enforcement according to the provisions of the ordinance. The penalty should be proportional to the offense.</p> <p>2. Require authority to issue stop work orders.</p> <p>3. Require authority to issue a civil penalty including due process.</p>	<p>1. Required.</p> <p>2. Required. Authority to stop an entire project if there is a problem with a portion of the project is recommended.</p> <p>Required.</p>
Section 10	Exceptions	<p>1. A board of appeals is optional; this process can be heard by any appropriate new or existing appeals body.</p> <p>2. A written finding of fact must be prepared that addresses the criteria found in the model ordinance.</p> <p>3. Approval of the exception is required before permits are issued and construction is allowed.</p> <p>4. An exception should only be valid for a specific period of time.</p> <p>5. A right of appeal process is required.</p>	<p>1. Optional. The board should be composed of persons with expertise in the subject. The hearings examiner can also be used.</p> <p>2. Required.</p> <p>3. Required.</p> <p>4. Recommended.</p> <p>5. Required.</p>
Section 11	Severability	<p>1. This section may be beneficial if a court declares part of your ordinance to be unconstitutional.</p>	<p>1. Optional, but recommended.</p>

TABLE 4 – ADDITIONAL INFORMATION ON THE MODEL STORMWATER MAINTENANCE ORDINANCE

SECTION REFERENCE	HEADING	COMMENTS	IS SECTION REQUIRED?
Section 1	Findings of Fact, Need and Purpose	<p>1. Where stormwater O &amp; M is a new concept, reasons for adopting the ordinance should be included. Being a Plan mandate is a reason for adoption.</p> <p>2. Public health, safety &amp; pollution concerns should be addressed.</p> <p>3. Any local concerns should be emphasized.</p>	This is an optional section; its omission would not affect the legality of the ordinance.
Section 2	Definitions	<p>1. Definitions should explain stormwater concepts that are not commonly understood or which have a unique meaning.</p> <p>2. The technical manual glossary is a good source document.</p>	This entire section is required. Definitions used must be either identical to Ecology definitions or an approved equivalent.
Section 3	General Provisions		This is an optional section; its omission would not affect the legality of the ordinance.

SECTION REFERENCE	HEADING	COMMENTS	IS SECTION REQUIRED?
Section 4	Applicability of Ordinance	<p>1. Include the area that the ordinance actually applies to (e.g. this may be only part of a city or county).</p> <p>2. Include a paragraph regarding potential conflicts between ordinances.</p> <p>3. Include a paragraph authorizing administrative standards.</p>	<p>1. Optional.</p> <p>2. The first paragraph of this section is optional, but is recommended.</p> <p>3. Optional.</p>
Section 5	General Requirements	<p>1. Require maintenance of stormwater facilities.</p> <p>2. BMPs are to be inspected annually and maintained as necessary.</p> <p>3. Procedures for proper disposal of wastes should be included here.</p>	<p>1. Required.</p> <p>2. Required. Specific maintenance policies should be left to the manual or included in other standards to prevent having to redraft the ordinance when maintenance procedures are revised.</p> <p>3. Required. Designate who is responsible for maintenance, operation and repair of both public and private drainage systems and BMPs.</p>

SECTION REFERENCE	HEADING	COMMENTS	IS SECTION REQUIRED?
Section 6	Administration	<p>1. List the position or department that administers the ordinance.</p> <p>2. State the position or department that is to develop an inspection program.</p> <p>3. List the position or department that enforces the ordinance.</p>	<p>1. Required. We recommend including the authority to develop and implement administrative procedures.</p> <p>2. Required.</p> <p>3. Required.</p>
Section 7	Inspection Program	<p>1. Require that inspections be done during regular working hours and at other reasonable times.</p> <p>2. Require the presentation of credentials, reasons for inspection and the methods of inspecting sites.</p> <p>3. Establish a master inspection and maintenance schedule of private facilities. Update the list with bot existing and new facilities.</p> <p>4. An annual report should be prepared.</p>	<p>1. Required.</p> <p>2. Required.</p> <p>3. Required.</p> <p>4. Required.</p>
Section 8	Enforcement	<p>1. Require enforcement according to the provisions of the ordinance. The penalty should be proportional to the offense.</p> <p>2. Require authority to issue orders for maintenance and/or repair.</p> <p>3. Give notice when penalties will come due.</p> <p>4. Penalties recovered may be paid to a designated account.</p>	<p>1. Required.</p> <p>2. Required.</p> <p>3. Required.</p> <p>4. Optional.</p>
Section 9	Severability	<p>1. This section may be beneficial if a court declares part of your ordinance to be unconstitutional.</p>	<p>1. Optional, but recommended.</p>